

REMARKS

The Office Action dated May 1, 2003 has been received and carefully noted. That Office Action indicated that the proposed drawing correction filed with Applicant's last Response was approved by the Examiner and that corrected drawings would be required in reply to the Office Action. Thus, formal, replacement drawings are provided with this Response and approval thereof is respectfully requested.

Claims 1, 2 and 4-7 are pending and have been examined. Claims 1, 2 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Timbs et al.* (U.S. Patent No. 6,018,521) in view of *Roach Jr.* (U.S. Patent No. 5,845,211). Claims 5 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Timbs et al.* in view of *Roach Jr.* as applied to claim 1 and further in view of *Korpela* (U.S. Patent No. 5,946,634). Claim 7 remains rejected under 35 U.S.C. §103(a) as being unpatentable over *Timbs et al.* in view of *Roach Jr.* as applied to claim 1 and further in view of *Takase et al.* (U.S. Patent No. 5,963,555). The above rejections are respectfully traversed based on the remarks that follow.

The present invention is directed, as recited in independent claim 1, to a broadband cellular network device. The device includes a base station control unit adapted to control distribution of ATM cellular traffic having ATM cells and an ATM controller, where the controller is separate from the base station control unit, but connected to and being controlled by the base station control unit. The device also has an ATM switching means connected to and being controlled by the ATM controller and

adapted to switch ATM cellular traffic. The ATM controller is arranged to function between the base station control unit and the ATM switching means and is arranged to provide an interface for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions. The ATM controller is also an interface for issuing commands for connecting and disconnecting traffic channels passing through the ATM switching means.

Timbs et al. is directed to a network interface subsystem for use in an ATM communications system. The network interface (NI) system is comprised of a base transceiver subsystem (BTS), a base station controller (BSC), a Base Station Transceiver Subsystem Interface (BTISI), a transcoder (XC), an operations maintenance and control subsystem (OMC), and an ATM switch providing for communications of the electronic data as packetized ATM cells between the BTISI, NI, XC, and the BSC. The BTISI is coupled to each of the cell sites and to the ATM switch and provides for packetizing the electronic data as ATM cells for transmission by the ATM switch, for transmitting and receiving the packetized ATM cells communications with the ATM switch, and for depacketizing the electronic data responsive to the received ATM cells from the ATM switch.

However, *Timbs et al.* fails to teach or suggest all of the elements of the present claims. *Timbs et al.* discloses packets being converted into cells and discloses that the BSC acts as an interface with the mobile switching center (MSC) for radio resource

management, channel allocation and coordination of radio resources for origination, termination and handoff of calls. However, while *Timbs et al.* discloses the conversion of packets into cells, that does not teach or suggest converting commands, as recited in claim 1. In the present Office Action, the Office now acknowledges that *Timbs et al.* “does not specifically [sic] discloses converting commands of a first protocol into commands of a second protocol.” In an effort to cure this acknowledged deficiency, the Office also cited *Roach Jr.*

Roach Jr. is directed to a wireless Integrated Services Digital Network ("WISDN") that replaces conventional wireless networks with a plurality of network elements including intelligent cellsites ("ICSs"), a central site controller ("CSC"), a billing aggregator and an operation and support system, all of which are interconnected to the public switched telephone network ("PSTN") via the integrated services digital network ("ISDN"). The ICSs communicate with users who request services via radio communication. The ICS in which a service requesting user is located interfaces the user with the ISDN, which terminates the user's call using traditional telephony switching methods. When a call to the user is initiated from a PSTN subscriber, the PSTN's service control point may access the CSC, which provides authentication services and routing information (such as the current location of the user) with which the PSTN terminates the call to the selected ICS. Registration techniques provide updates on the user's location. When the user moves out of the coverage area of the selected ICS, it initiates a hand off by sending messages, over the ISDN signalling channel, to surrounding ICSs requesting

that each take a reading on the signal from the user. Reports are received from the surrounding ICSs and the selected ICS chooses a second ICS to which the call will be handed off.

Additionally, *Roach Jr.*, at column 13, lines 1-5, mentions that ISC 110 interfaces with a base station 114 having RF equipment 118 converting control messages etc., to a protocol understandable to MSC. This is the section of *Roach Jr.* that the rejection appears to rely on. However, a person skilled in the art would have no incentive to combine any teaching from *Roach Jr.* with *Timbs* as *Roach Jr.* is unrelated to ATM structures.

In the rejection of claims 1, 2 and 4, the Office has alleged that the combination of *Roach Jr.* with *Timbs* would have been motivated “to allow different devices with different protocols to communicate with one another to cause switching actions.” However, nowhere in the rejection is it specified where such a need to allow different devices to communicate is expressed or any appreciation for the problem is discussed. The Office has alleged that the combination of the references would occur to cure the deficiencies of *Timbs* discussed earlier and acknowledged by the Office but for no other reason.

To establish a *prima facie* case of obviousness, there must be some motivation or suggestion, either in the references themselves or within the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The fact that a given modification would have been “well within the

ordinary skill in the art” is not sufficient to establish a *prima facie* case of obviousness. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). In the present rejection of claims 1, 2 and 4, Applicants respectfully assert that the motivation to combine *Roach Jr.* and *Timbs* is insufficient to sustain the rejection and that the rejection should be withdrawn.

Additionally, Applicants respectfully assert that the rejection is guided merely by impermissible hindsight reasoning. “To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” In re Rouffet, 47 USPQ2d 1453 at 1458(CAFC 1998). Applicants respectfully assert that the burden of proof in making the rejection of claim 1, 2 and 4 under §103 has not been met and that the rejection should be withdrawn.

Lastly, as indicated above, *Roach Jr.* is unrelated to ATM structures and there has been no suggestion that one of ordinary skill in the art would have looked to *Roach Jr.* to cure any problem occurring in *Timbs*, where the latter reference is concerned with an ATM communications system. There is no reason to believe that one of ordinary skill in the art would have examined functioning of a wireless Integrated Services Digital Network, as discussed in *Roach Jr.*, in order to address a deficiency in an ATM

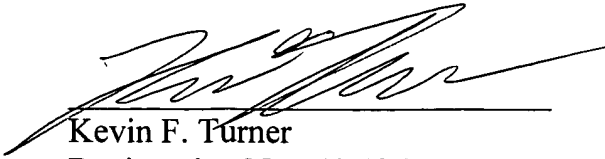
communications system, as discussed in *Timbs*. For this additional reason, Applicants respectfully assert that the rejection of claims 1, 2 and 4 is improper and should be withdrawn.

With respect to the rejections of claims 5-7, even if Applicants accepted that *Korpela* and *Takase et al.* teach what the Office has alleged, neither reference cures the deficiencies of *Timbs et al.* and *Roach Jr.*, as discussed above. Indeed, neither secondary reference teaches or suggests, taken together or apart, an ATM controller that is arranged to provide an interface for converting commands of a first communication protocol, issued by the base station controller unit, into commands of a second communication protocol, causing switching actions. As such, Applicants respectfully assert that the rejection of claims 5-7 are improper for failing to teach all of the elements of those claims by virtue of their dependence on claim 1. Reconsideration and withdrawal are respectfully requested. As such, the Applicants respectfully request allowance of claims 1, 2 and 4-7 and the prompt issuance of a Notice of Allowability.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Kevin F. Turner
Registration No. 43,437

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

KFT:lls

Enclosures: Submission of Corrected Drawings